

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 1, lines 4-8, with the following amended paragraph:

TECHNICAL FIELD BACKGROUND

The present invention relates to a drive circuit for a piezoelectric pump used in a cooling device for cooling a heat-generating body of an electronic component, and to a cooling system that uses this drive circuit.

BACKGROUND ART

Please replace the paragraph on page 4, lines 17-27, with the following amended paragraph:

DISCLOSURE OF THE INVENTION

Problems to be Solved by the Invention

The first problem to be solved by the present invention is the generation of large vibrational noise from the piezoelectric pump and the consequent inability for application to devices that are used in environments in which quiet operation is desired. Although the drive waveform of a piezoelectric pump is a frequency that is lower than audible frequencies, [[This]] this vibrational noise occurs both because, the drive waveform includes a harmonic frequency component within the audible frequency band, and because the drive waveform is not a sine wave. Undesired noise is produced by the vibration of the harmonic component.

Please replace the paragraph on page 5, lines 14-16, with the following amended paragraph:

SUMMARY

The present invention was realized in view of the above-described problems of the prior art and has as an object the provision of a piezoelectric pump drive method that allows a reduction in size and weight.

Please replace the paragraph on page 5, lines 25-27, with the following amended paragraph:

Means for Solving the Problems

The drive circuit for a piezoelectric pump of the present invention includes:

Please replace the paragraph on page 8, lines 10-14, with the following amended paragraph:

Effects of the Invention

As the first effect of the present invention, the drive waveform of the piezoelectric pump is a sine wave, whereby the piezoelectric pump can realize quiet operation as a cooling device without generating undesirable vibrational noise from the piezoelectric pump.

Please delete the entire section entitled “Explanation of Reference Numbers” starting on page 9, line 16 and ending on page 10, line 24.

Please replace the title of the section on page 10, line 26, with the following amended title:

DETAILED DESCRIPTION OF BEST MODE FOR CARRYING OUT THE
INVENTION

Please replace the paragraph on page 14, lines 9-16, with the following amended paragraph:

In FIG. 8: 20 is a D-class amplifier; 21 is a PWM modulator; 22 is an output switch unit; 22a, 22b, 22c, and 22d are a first switch, a second switch, a third switch, and a fourth switch,

respectively; 23 is a low-pass filter; 23a is a first inductor; 23b is a first capacitor; 23c is a second inductor; ~~[[23c]]~~ 23d is a second capacitor; 24a is a first inverter circuit; and 24b is a second inverter circuit. In addition, constituent elements that are identical to elements of the first embodiment have been given the same reference numbers, and redundant explanation is therefore here omitted.